Received CFTC Records Section 03/01/2000

Appendix A

CX submissions concerning its Block Trading Proposal

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Sep 21 1/2, 27/53

99-64 September 15, 1999

Via Facsimile

Jean Webb, Secretariat,
Commodity Futures Trading Commission,
Three Lafayette Centre,
1155 21st Street, N.W.,
Washington, D.C. 20581.

Re: Cantor Financial Futures Exchange, Inc. Proposed Amendments to Rules Permitting
Block Trading - Submitted Pursuant to
Commission Regulations §§ 1.41(c), 1.38(a)

Dear Ms. Webb:

Submitted herewith for approval by the Commission pursuant to Section 5a(a)(12)(A) of the Commodity Exchange Act, as amended (the "Act"), and Commission Regulations §§ 1.41(c) and 1.38(a) thereunder are new Rules 4-A and 305-A and amended Rules 300, 302 and 306 of the Cantor Financial Futures Exchange, Inc. ("CX"), permitting the execution of Block Trades (as defined below) on the terms and subject to the conditions described in such Rules (such new and amended Rules collectively, the "Block Trading Rules"). Such approval is sought only with respect to those Contracts for which CX has been designated as a contract market.

Summary of Block Trading Rules

The Block Trading Rules (attached hereto as Annex I) are designed to permit the execution of large orders by negotiation between the parties to a trade rather than through the Cantor System. Certain qualified market participants will be permitted to agree among each other the

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terms of a trade and to report such trade back to CX upon execution (each such transaction, a "Block Trade"). All Block Trades will be subject to the following specific requirements:

- In connection with the Block Trading Rules, CX is creating a new class of Market Makers, called "Primary Market Makers". Primary Market Makers will be obligated to act as Market Makers with respect to the relevant Contract or Contracts throughout the trading hours in the applicable time zone (except for short intervals).
- A Clearing Member, Screen Based Trader or Foreign Screen Based Trader (hereinafter collectively referred to as a "trader") may be entering into Block Trades on a proprietary basis or, if otherwise permitted, for a Customer or other third party.
- If a trader (or any of its Affiliates) executes a Block Trade on a proprietary basis, such trader (or any of its Affiliates) must be satisfying its obligations as a Primary Market Maker in the relevant contract market. Block Trades directly between two Primary Market Makers, or between a Primary Market Maker represented by an agent and another Primary Market Maker, are prohibited.
- If a trader, acting as an agent for a Customer or another third party, executes a Block Trade by matching such Customer's or third party's order with that of another Customer or third party, then neither of the Customers or other third parties may make a market in Block Trades unless it is a Primary Market Maker in the relevant contract market. The executing trader is not responsible for determining whether the Customer or third party for which it is acting is in compliance with the foregoing requirement, and in no event will a Block Trade be rescinded because of a violation of the foregoing requirement by a Customer or third party.

- Each underlying order must indicate that it is to be, or may be, executed by means of a Block Trade.
- Each underlying order must be for at least 50 Contracts, which number will be increased to 75, 100, 200 and 250 Contracts once the average monthly trading volume on CX with respect to the relevant Contract has exceeded 15,000, 30,000, 100,000 and 150,000 Contracts, respectively, for three consecutive months. A trader may not aggregate orders for different accounts in order to satisfy this threshold requirement, unless it is a commodity trading advisor registered under the Act ("Commodity Trading Advisor"), including without limitation any investment adviser registered as such with the Securities and Exchange Commission that is exempt from regulation under the Act or Commission Regulations thereunder ("Investment Adviser"), with total assets under management exceeding US\$50 million.
- The price for each Block Trade must be fair and reasonable in light of (i) the size of the Block Trade and (ii) the price and size of other trades in the same Contract at the relevant time. A Block Trade will not be rescinded because of a violation of the foregoing requirement, but the parties to any Block Trade not satisfying this requirement will be subject to disciplinary action.
- Each party to a Block Trade must qualify as an "Eligible Participant" within the meaning of Commission Regulation § 36.1. However, if the Block Trade is entered into on behalf of Customers by a Commodity Trading Advisor, including without limitation any Investment Adviser, with total assets under management exceeding US\$50 million, the individual Customers need not so qualify.
- Information relating to each Block Trade (identifying the relevant Contract, contract month, price, quantity, time of execution and counterparty Clearing Member) must be reported to

CX within 10 minutes of its execution (or, in the case of a Block Trade that is executed during the last 10 minutes of the Current Trading Hours, or after the Current Trading Hours, on any day, prior to the opening of business on the next succeeding day). CX, in turn, will publicize information identifying the relevant Contract, contract month, price and quantity promptly after it has been reported to CX.

Consistent with its policies relating to EFPs, NYCE's Compliance Department will periodically review Block Trades on a random basis in order to verify whether such trades have been conducted in compliance with the foregoing requirements. As part of such review, (i) Primary Market Makers will be required to produce satisfactory documentation, including account statements, with respect to Block Trades and (ii) compliance by Primary Market Makers with the minimum volume and other requirements specified in their market making agreements with CX will be monitored.

Block Trades are subject to the general Rules of CX (other than those which by their terms apply only to trading through the Cantor System), and must be cleared through Clearing Members.

Legal and Regulatory Background

Act and Regulations. Section 4(a) of the Act makes it unlawful for any person to enter into a futures contract unless "such transaction is conducted on or subject to the rules of a board of trade which has been designated by the Commission as a 'contract market' for such commodity." When adopting this provision in 1974, Congress stated that:

"[T]he purpose of this requirement is to ensure that all trades are executed at competitive prices and that all trades are focused into the centralized marketplace to participate in the competitive determination of the price of futures contracts. This system also provides ready access to the market for all orders and results in a continuous flow of price information." (Report of Sen. Committee on Agriculture and Forestry, S. Rep. No. 1131, 93rd Cong., 2d Sess. 16 (1974)).

The Commission implemented this objective by adopting Regulation § 1.38(a), which requires that all purchases and sales of futures contracts "be executed openly and competitively". Both Congress and the Commission, however, have recognized the need for certain exceptions from these general requirements. Based upon Section 4c(a) of the Act, Regulation § 1.38(a) expressly contemplates "transactions which are executed noncompetitively in accordance with written rules of the contract market which have been submitted to and approved by the Commission".

Block Trades executed in accordance with new CX Rule 305-A will constitute transactions conducted "subject to" the rules of a contract market within the meaning of Section 4(a) of the Act. For the reasons set forth below, we believe that the Block Trading Rules should be permitted as an exception from the general requirement of open and competitive execution.

Concept Release. In its concept release relating to the "Regulation of Noncompetitive Transactions Executed on or Subject to the Rules of a Contract Market" (63 Fed. Reg. 3708, January 26, 1998) (the "Concept Release"), the Commission has suggested a regulatory approach permitting noncompetitive transactions "as an adjunct rather than as an alternative to existing regulated markets" (Id., at 3710). It noted that "[s]uch an approach might improve the usefulness and efficiency of existing markets for institutional or professional users but with a reduced risk of market fragmentation" (Id.).

The Concept Release not only mentioned block trading as an alternative execution procedure that could, under certain circumstances, qualify for an exception in accordance with the proviso to Regulation § 1.38(a), it also pointed out three examples of non-competitive trading rules of U.S. futures exchanges which had previously been approved by the Commission:

"The CME, the New York Cotton Exchange ... and the New York Futures Exchange ... have adopted similar procedures providing for the execution of large orders. These procedures may be used only upon customer request or if the large order bid or offer is the best price available to satisfy the terms of the order. A member makes a request for a large order bid and/or offer in the appropriate trading area. Responding members may make bids and/or offers at, above or below the current prevailing bid or offer in the underlying market for regular size orders. Only the best bid and/or offer shall prevail, and the large order must be filled on an all-or-none basis. The large order execution price does not trigger conditional orders in the underlying market, such as stop or limit orders." (Id., at 3716).

Securities Exchanges. Similarly, U.S. securities and options exchanges have long permitted block trading, subject to specific exchange rules. On the New York Stock Exchange, block trading is intermediated by block traders and specialists. Large customer orders may be filled in different ways: The block trader himself may (i) serve as the counterparty for the entire transaction, (ii) seek customers to take the other side of the trade or (iii) combine both strategies. In each case, the block trade is reported to the exchange once a price for the block is agreed. The rules applicable to block trading on the Chicago Board Options Exchange are somewhat different in that they require the member trying to place a block order to disclose the terms and conditions of such order to the floor before execution can take place.

LIFFE Block Trade Facility. Effective April 19, 1999, the London International Financial Futures and Options Exchange ("LIFFE") has put into place a Block Trade Facility to facilitate the execution of large orders for certain qualified participants. The facility is available to LIFFE members and so-called "wholesale clients" (i.e. those with sufficient knowledge, expertise and understanding of the implications of the Block Trade Facility) who wish to trade at least the applicable minimum number of "lots" outside the regular market, at a mutually agreed price. Each trade must be executed at a price that is fair and reasonable in light of the lot size and the price and size of business

applicable to trading on the floor. Price and size information for each executed trade must be reported to the exchange by the participating LIFFE members. It should be noted that LIFFE's Block Trading Facility is available to U.S. participants.

CFTC Advisory. In an advisory issued on June 4, 1999 (the "Advisory"), the Commission invited for the first time, and emphasized that it "stands ready" to consider, contract market proposals relating to block trading procedures for certain types of orders. According to the Advisory, each proposal will be considered on a case-by-case basis under the Act and Commission regulations thereunder, taking into account the particular characteristics and needs of the contract market submitting the proposal and its participants. CX welcomes this flexible approach and has developed the Block Trading Rules described herein which are tailored to the contract markets for which CX has been designated by the Commission.

Discussion of Rule Proposal

The Advisory requires that any submission seeking permission for certain noncompetitive transactions (i) discuss the potential impact of such transactions on the recognized functions of the relevant futures market in light of the countervailing benefits and (ii) demonstrate that (A) the proposal is the least anticompetitive means of achieving the objective, (B) the proposed transactions fulfill some particularized need of market participants that the traditional open and competitive execution methods cannot fulfill as well and (C) such transactions are structured in such a way as to complement the competitive market.

Execution of Large Orders. The increased, and growing, use of futures markets by financial institutions has created a need to integrate large blocks of orders into the ongoing trading activity without impacting the prices in the relevant market. This is particularly relevant for markets, such as CX, that trade contracts for the future delivery of government securities. When blocks of orders are broken up and "filled" successively in parts, this may lead to gradually deteriorating price levels. If parts of a large order are "filled" at varying price levels, the

effectiveness of useful and legitimate trading strategies, such as inter-market arbitrage or spreading, is impaired, and it becomes de facto impossible to hedge large transactions in an efficient manner. A block trading facility, by contrast, which permits the execution of any large order at a certain, single price enables Primary Market Makers to assume the price risk so that the ultimate Customers do not have to bear it. From the point of view of market efficiency, this price risk transfer is a "key" benefit of block trading. Customers who wish to eliminate price execution risk can transfer that risk to Primary Market Makers who are experienced professionals paid to assume such risks. Block trading will be an option available to CX's users, not a requirement. Under the Block Trading Rules, what constitutes a "large order" is a function of CX's overall trading volume (i.e., the required minimum order size will automatically increase as the overall trading volume grows). This sliding scale takes into account the fact that the ability to effectively fill large orders is a function, in part, of the size and liquidity of the underlying market.

Competition with OTC and Cash Markets. Futures exchanges face strong, and still growing, competition from over-the-counter markets for derivative instruments. addition, a market like CX, which trades futures contracts based on widely traded government securities, competes in many respects directly with the underlying cash market. Permitting futures exchanges to handle large orders in a manner that addresses the needs of market participants will help to bring trades that might otherwise be executed over the counter back to a regulated futures exchange, where they are subject to exchange rules and other regulatory requirements and cleared through a recognized clearing organization. In today's regulatory environment, futures exchanges are trying to achieve the same goal when they permit exchange for physicals and similar transactions. These transactions in effect already permit the noncompetitive execution of large orders, albeit in a less efficient manner than would designated block trading facilities.

International Competitiveness. As noted above, LIFFE has recently made available to its members a Block

Trade Facility substantially similar to the Block Trading Rules now proposed by CX. Both LIFFE and MATIF have recently obtained no action relief from the Commission with respect to installing terminals in the United States, which will further facilitate usage of these exchanges by U.S. participants. As futures exchanges based in jurisdictions outside the United States expand their product range and their reach into U.S. markets and to U.S. participants, they become potential competitors and may make it increasingly difficult for CX and other U.S. futures exchanges to effectively compete on an international level. This is particularly true for the high-volume business that institutional customers bring to futures markets and that is essential to the liquidity of these markets. In the competition among markets, the ability of an exchange to accommodate block trading has become a particularly important, and necessary, feature. LIFFE's Block Trading Facility will be accessible by participants from within the U.S. We believe, therefore, that U.S. futures exchanges should be put in the same competitive position as LIFFE, which now permits block trading of futures, and the U.S. securities exchanges, on which block trading has long been customary. CX's proposed block trading rules are similar to those applicable to LIFFE's Block Trading Facility.

Price Discovery. Traditionally, one of the main concerns regarding block trading of futures has been that the execution of trades outside the relevant contract market potentially undermines the price discovery function of the market. For a number of reasons, we do not believe that this concern is particularly relevant in the case of CX: First, in order to execute Block Trades, Primary Market Makers, who will include the largest government securities dealers in the world, will be competing with each other (as they do in the cash and OTC markets), and will be dealing with sophisticated Customers. The Primary Market Makers will be expected to, and effectively will have to, offer attractive prices to CX's participants. Second, the Block Trading Rules provide for reporting (within 10 minutes) and prompt public dissemination of information identifying the relevant Contract, contract month, price and quantity for each Block Trade, thereby making prices available and readily discoverable. Also, the fact that a Clearing Member, Screen Based Trader or Foreign Screen Based Trader

(or one of its Affiliates) entering into a Block Trade on a proprietary basis will have to be active as a Primary Market Maker in the underlying contract market and cannot enter into Block Trades directly with another Primary Market Maker, means that actionable exchange prices for the relevant Contract will continue to be available. Third, it should be noted that, under certain circumstances, the lack of specific block order procedures may actually impair an exchange's price discovery function. Large orders, when inserted in the regular course of trading, can have a disruptive effect on the market and, consequently, the prices prevailing in such market. This was noted, for example, in a staff report by the Securities and Exchange Commission on the 1987 market break, which recommended "efforts by the futures markets to provide better systems for integrating block trading". ("The October 1987 Market Break", SEC Staff Report, page 3-19, footnote 49). Fourth, CX is only one of several vehicles for price discovery. futures contracts traded on CX are based on widely traded government securities for which cash price information is readily available. Given the volume of cash government securities trading, it is clear that the futures markets are not the only pricing source. In addition, contracts substantially similar to CX's Contracts are also traded on other futures exchanges.

Liquidity. Block trading has also been criticized for draining liquidity from a centralized market. For the following reasons, CX believes that the Block Trading Rules would not have a material adverse effect on liquidity: First, the Block Trading Rules provide that Primary Market Makers are prohibited from entering into Block Trades directly with each other. This ensures that professional participants cannot move all their trading activity to a separate, not publicly accessible "market outside the market". In order to reduce their exposure with respect to each other and to liquidate open positions, Primary Market Makers will be expected to trade on CX's virtual trading floor, thereby contributing significant volume to the contract market itself. Block trading on CX will complement, not supplant, the regular trading activity on the contract market. <u>Second</u>, we expect that the price risk transfer opportunities provided by CX's block trading facility (as described above) will increase the amounts of

open interest. <u>Third</u>, we note that both block trading and regular trading, each serving a distinct function, have long co-existed in the securities markets.

Customer Protection. Trading in a centralized marketplace is also designed to protect the ultimate customers - buyers and sellers of futures contracts - by ensuring that their orders are executed at the "right" price. The Block Trading Rules provide that the price at which any Block Trade is executed must be "fair and reasonable". In addition, since prices for Block Trades will be negotiated directly between the relevant parties, the Block Trading Rules provide that any use of this noncompetitive execution procedure will be limited to parties that are in a position to evaluate the specific risks involved in block trading and make their own, independent determination as to the appropriateness of a price negotiated in a Block Trade. Consistent with the spirit of Section 4(c) of the Act and Part 36 of the Commission's Regulations thereunder, which contemplate a lesser degree of regulation for certain institutional participants in light of their professional capacity and experience, block trading on CX will be available only for parties that qualify as "Eligible Participants" within the meaning of Commission Regulation § 36.1(c)(2) (except in the case of a Block Trade entered into on behalf of Customers by a Commodity Trading Advisor or Investment Adviser with total assets under management exceeding US\$ 50 million). It is worth noting that the entities qualifying as "Eligible Participants" are essentially the same entities that already engage on a large scale in over-the-counter trading of financial instruments that, in many cases, has similar characteristics and risks as block trading.

Risk of Manipulation or Fraud. We do not believe that block trading raises the specter of any inherent, or increased, risk of manipulation or fraud. In this connection, it is worth noting that block trading on CX will be more transparent and more heavily surveilled and regulated than trading of similar instruments in the OTC markets, which have existed for years and grown to their current levels without raising particular concerns about manipulation or fraud.

Based on the foregoing analysis, we believe that the Block Trading Rules are necessary, both (i) to address an existing need of institutional market participants to execute large orders for futures contracts at a single price and (ii) to put U.S. futures exchanges in the same competitive position as other exchanges and over-the-counter markets. As proposed, the Block Trading Rules are designed to maximize the benefits for trading participants and Customers.

The Block Trading Rules were approved by the Board of Managers of the New York Cotton Exchange on July 14, 1999 and by CX's Board of Directors on July 26, 1999. Upon approval by the Commission, the Block Trading Rules will take effect on a date to be determined by the President or either of the Co-Chairmen of CX.

Capitalized terms used and not otherwise defined in this letter (including Annex I hereto) have the meanings assigned to them in the By-Laws and Rules of CX, as amended by the Block Trading Rules.

If you have any questions regarding this submission, please contact me at (212) 742-6040.

Sincerely yours,

Audrey R. Hirschfeld Senior Vice President General Counsel

(Attachment)

cc: David P. Van Wagner, Esq. Mr. Marvin Jackson

RULE 4-A BLOCK TRADE

The term "Block Trade" shall have the meaning specified in Rule 305-A.

RULE 25 PRIMARY MARKET MAKER

The term "Primary Market Maker" means any Market Maker acting as such with respect to the relevant Contract or Contracts in accordance with its market making agreement throughout the trading hours in the applicable time zone (except for short intervals).

RULE 32 TRADING PRIVILEGES*

The term "Trading Privileges" means the right (i) to access a Terminal Operator and place Orders for Contracts for entry into the Cantor System (provided that the Trading Privileges of Associate Members shall be limited as provided in Section 35-A of the By-Laws), or (ii) with respect to a Direct Access Trader (including such Person's designated Authorized Traders) which has been granted Direct Access, to transmit Orders for Contracts in electronic form directly to the Cantor System and (iii) to enter into EFPs and Block Trades, subject to the specific requirements and conditions applicable thereto.

RULE 300 TIME AND PLACE OF TRADING'

- (a) <u>Subject to Rules 305 and 305-A, trading</u> of Contracts shall be conducted only through the Cantor System, and only during the hours set forth in the Rules governing such Contracts.
- (b) Cantor will provide a CFFE Screen at the booth (on the Floor) of any member of the Cotton Exchange or CSCE requesting a CFFE Screen solely for use by such member. In addition, Cantor may, in its sole discretion, provide, at the booth of such member, a

Marked to show changes from the rule as currently in effect.

direct telephone line to one or more Terminal Operators solely for use by the member that controls the booth in which such telephone line is situated. If Cantor provides a member of the Cotton Exchange or CSCE with a direct telephone line, such member shall supervise access to and the use of such direct telephone line to ensure that such line is secure and only accessible to and used by Authorized Traders of such member and such member shall be fully responsible for any order placed on such direct telephone line.

(c) The Board of Directors or, in the absence of a quorum thereof, the Executive Committee, may, in its discretion, without previous notice, close CFFE or any Contract market thereof on such days or portions of days as will in the Board's or Executive Committee's judgment serve to promote the best interest of CFFE. During such periods, all matters relating to notices, deliveries, margin calls, Clearing Corporation settlement or other CFFE or Contract requirements shall remain in status quo without prejudice thereby to any interest concerned and the subsequent rulings of the Board with respect thereto shall be binding on all parties in interest, notwithstanding anything in these By-Laws and Rules to the contrary.

RULE 302 OFFERS TO BUY OR SELL*

- (a) All offers to buy or sell a Contract shall be quoted in such terms as are set forth in the Rules governing said Contract.
- (b) No transaction that is not made through the Cantor System shall be permitted, reported, or recorded in the record of transactions, except:
 - (1) transfers of open Contracts of a Clearing Member necessitated by the death of the only member of such firm who had held membership in the Cotton Exchange;

Marked to show changes from the rule as currently in effect.

- (2) transfers of open Contracts of a Customer, made at the request of such Customer, from one Clearing Member to another Clearing Member;
- (3) transfers of open Contracts of a Customer at the request of the original Clearing Member to another Clearing Member;
- (4) transfers of open Contracts from one account to another within the same office of a Clearing Member, or between different offices of one Clearing Member, where no change in ownership is involved; provided that the transferred Contracts in the transferee account must be recorded at the original date and price;
- (5) transfers or exchanges of Contracts in connection with EFPs or Block Trades; and
- (6) transactions conducted pursuant to Rules 308(b) and 309(a)(3).

Such trades may be effected between or in the offices of the Clearing Member or Clearing Members but must be reported to CFFE for recording, clearly showing the exception above justifying the trade and stating whether the transaction has resulted in a change of ownership, the quantity, if any, of the spot commodity involved, the kind and quantity of the Contracts, the price, the name of the other Clearing Member, if any, and any other pertinent data. The Clearing Member must in its records clearly label all such trades. The names of the purchaser and seller shall be given when required.

Acceptances of offers or parts of offers to buy or sell shall be binding upon the acceptor at the price named by the offering Clearing Member, Associate Member, Screen Based Trader or Foreign Screen Based Trader.

(c) If an error or dispute arises between Clearing Members, Associate Members, Screen Based Traders or Foreign Screen Based Traders, or any combination thereof, as to a claim of a purchase or a sale of a Contract, the party claiming the sale or purchase

- shall, unless otherwise mutually agreed upon, liquidate the same as soon as possible and the <u>resulting</u> loss resulting shall be the subject of arbitration. Any claim of a purchase or sale of a Contract must be made promptly after discovery and no later than five minutes before the next Trading Day for such Contract.
- (d) If a Clearing Member, Associate Member, Screen Based Trader or Foreign Screen Based Trader claims to have bought or sold, or has bought or sold, a Contract and the Clearing Member, Associate Member, Screen Based Trader or Foreign Screen Based Trader with whom the trade has been made, or is claimed to have been made, is absent or cannot be found, the trade shall be closed at the opening of the next Trading Day for such Contract, and notice of such closing of the trade shall be filed with CFFE, and the resulting loss, if any, shall, if the trade is disputed, be subject to arbitration, and if not disputed, shall be immediately paid.

RULE 305-A BLOCK TRADING

- (a) Clearing Members, Screen Based Traders and Foreign Screen Based Traders may enter into transactions with each other outside the Cantor System, at prices mutually agreed, with respect to Contracts that have been designated by CFFE for such purpose (each, a "Block Trade Contract"), provided that all of the following conditions are satisfied (such transactions, "Block Trades"):
 - (1) If a Clearing Member, Screen Based Trader or Foreign Screen Based Trader (or any of its Affiliates) executes a Block Trade on a proprietary basis, such Clearing Member, Screen Based Trader or Foreign Screen Based Trader (or any of its Affiliates) must be satisfying its obligations as a Primary Market Maker in the relevant contract market. Block Trades directly between two Primary Market Makers, or between a Primary Market Maker represented by an agent and another Primary Market Maker, are prohibited;

- If a Clearing Member, Screen Based Trader or (2)Foreign Screen Based Trader, acting as an agent for a Customer or another third party, executes a Block Trade by matching such Customer's or third party's order with that of another Customer or third Party, then neither of the Customers or other third parties may make a market in Block Trades unless it is a Primary Market Maker in the relevant contract market; provided that (i) the executing Clearing Member, Screen Based Trader Foreign Screen Based Trader is not responsible for determining whether the Customer or third party for which it is acting is in compliance with the foregoing requirement and (ii) in no event will a Block Trade be rescinded because of a violation of the foregoing requirement by a Customer or third party;
- (3) Each buy or sell order underlying a Block Trade must (i) state explicitly that it is to be, or may be, executed by means of a Block Trade and (ii) be for at least 50 Contracts; provided that such number will automatically increased to 75, 100, 200 and 250 Contracts once the average monthly trading volume on CX with respect to the relevant Contract has exceeded 15,000, 30,000, 100,000 and 150,000 Contracts, respectively, during three consecutive months; and provided, further, that only a commodity trading advisor registered under the Act, including without limitation any investment adviser registered as such with the Securities and Exchange Commission that is exempt from regulation under the Act or Commission Regulations thereunder, with total assets under management exceeding US\$50 million may satisfy this requirement by aggregating orders different accounts;
- (4) The price at which a Block Trade is executed must be fair and reasonable in light of (i) the size of such Block Trade and (ii) the price and size of other trades in the same Contract at the relevant time.

- (5) Each party to a Block Trade must qualify as an "Eligible Participant" (as such term is defined in Commission Regulation § 36.1); provided that, if the Block Trade is entered into on behalf of Customers by a commodity trading advisor registered under the Act, including without limitation any investment adviser registered as such with the Securities and Exchange Commission that is exempt from regulation under the Act or Commission Regulations thereunder, with total assets under management exceeding US\$50 million, the individual Customers need not so qualify.
- (b) Each party to a Block Trade shall comply with all applicable Rules of CFFE other than those which by their terms only apply to trading through the Cantor System.
- (c) Each Block Trade executed in accordance with clauses (a) and (b) above must be cleared through Clearing Members. Information identifying the relevant Contract, contract month, price, quantity, time of execution and counterparty Clearing Member for each Block Trade must be reported to CFFE within the 10 minutes immediately following execution of such Block Trade (or, in the case of a Block Trade that is executed during the last 10 minutes of the Current Trading Hours, or after the Current Trading Hours, on any day, prior to the opening of business on the next succeeding day). CX will publicize information identifying the relevant Contract, contract month, price and quantity for each Block Trade promptly after such information has been reported to CX.
- (d) Upon request by CFFE, each Clearing Member, Screen Based Trader or Foreign Screen Based Trader executing a Block Trade shall produce satisfactory evidence that such Block Trade meets the requirements set forth in this Rule 305-A. Any Block Trade in violation of these requirements shall be deemed an act detrimental to the interest and welfare of CFFE.

RULE 306 CUSTOMER INFORMATION AND RISK DISCLOSURE STATEMENT*

No Clearing Member or, if applicable, Screen Based Trader or Foreign Screen Based Trader shall accept an <u>Order</u> from, or on behalf of, any Customer, unless such Customer has been previously provided with a CFFE Customer Information and Risk Disclosure Statement in a form approved by the Board.

Marked to show changes from the rule as currently in effect.

Received CFTC Records Section

Appendix B

The Economics of Block Trading
Beth Seely, Industry Economist
Division of Economic Analysis
Working Paper No. 99-02

THE ECONOMICS OF BLOCK TRADING

Beth Seely*

Working Paper No. 99-02

Division of Economic Analysis
Commodity Futures Trading Commission

^{*} The views expressed in this paper are solely those of the author, and do not necessarily represent the views of the Commodity Futures Trading Commission or its staff.

Executive Summary

- Introduction of block trading on a futures exchange could result in a permanent change in the entire market microstructure. The segregation of a subset of trades, large orders, effectively fragments the market.
- The effects of market fragmentation on the quality of the market will be dependent on the extent to which market transparency and market liquidity are impacted. Potential market consequences may be mitigated with the development of regulatory criteria for use in the evaluation of proposed exchange trading rules permitting block trades.
- The economic rational for introducing block trades to futures exchanges coincides with the inability of the current market structure to provide sufficient liquidity for large transactions without the inclusion of a liquidity premium.
- A fundamental consideration to assessing the potential market impacts associated with the introduction of block trading to a futures market is the extent that the current market structure for the commodity is fragmented. The presence of considerable fragmentation in an underlying commodity market prior to the introduction of block trades may have fewer consequences for market performance following their introduction.
- Consideration of what constitutes a large transaction is an essential element of any
 evaluation of block trading rules. As a consequence, this memo suggests assessing a
 proposed minimum size for a block trade in relation to the market for the underlying
 commodity. Thus, a block trade size criteria is dependent on the characteristics of the
 specific market in question.
- An important element to the successful introduction of block trading is the ability of a block trade transaction to have prices that are consistent with the transaction prices reported in the primary trading venue. To this end, this memo suggests evaluation of how block trades are transacted in relation to the primary market. Block trades should include a mechanism tying the two markets together.
- An absence of transparency between the traditional trading venue and the block trade mechanism can affect the distribution of information and, consequently, affect market performance, removing the potential benefits from block trades. A critical element to be evaluated is how and when block trade transaction information is revealed to the market.

1. Introduction

It is generally recognized that futures markets perform three important functions.¹ First, futures markets can coordinate diversely held information on private market conditions, reflecting the demand and supply conditions for the underlying commodity.² Second, futures markets can provide a method to reduce risk. And third, when the institutional structure is efficient, a cash market position can be substituted with a futures market position with the user incurring fewer transaction costs. These economic functions improve production, consumption, product pricing, and investment decisions for both the market participants and the public.³ As a consequence, a fundamental regulatory goal corresponds with approving exchange rules that are consistent with a market structure that produces quality futures prices and improve these functions.

Recently, the Commission has started consideration of potential exchange trading rules that would permit block trades. Functionally, the change may affect a futures market's performance. The introduction of block trades reflects a market's heterogeneity of needs across participants. In particular, market liquidity needs vary across the users of the market where certain groups incur larger transaction costs in order to complete large trades in relation to the market. Similarly, the ability of the market to provide liquidity varies, dependent on the market's institutional structure and the overall size of the market.

A potential impact of a particular market inadequately supplying liquidity is the deviation of the transaction price from its *intrinsic* value. For example, this occurs when the execution

¹ See for example, Duffie, Futures Markets, Englewood Cliffs, NJ: Prentice-Hall, 1989 or Hull, John, Introduction to Futures and Options Markets, Englewood Cliffs, NJ: Prentice-Hall, 1991.

² This provides markets for the underlying with a market determined price available for price basing.

³ Recognition of this public interest of futures markets and the informational content of prices can be found in Section 3 of the Commodity Exchange Act.

needs of one type of trader, either a buyer or seller, is greater than the market's capacity to provide immediate execution without affecting the bid, and the demand for immediacy in these circumstances results in a *liquidity* premium. A trade may occur at a price which does not accurately reflect underlying market conditions, but rather reflects the underlying commodity's intrinsic value plus or minus a liquidity premium to induce counter-parties to the transaction. In the case when the trade size is unusually large, a liquidity premium may be required to find a counter-party or counter-parties to the transaction. As a consequence, the transaction price reflects market information that is not related to conditions in the underlying commodity market and impacts the futures market's ability to perform its economic functions, affecting the public interest.

In general, market structures vary in their ability to provide liquidity. The introduction of block trades essentially fragments a centralized market into two markets, one market for large trades and one market for trades that are not large. To what extent these changes to a market's organization affect the public interest are dependent on the many economic features imbedded in the proposed rules and the existing market organization. This informational memo provides an overview of economic issues that may be relevant to futures market performance and consequently, may inform subsequent regulatory concerns that may arise with the introduction of block trades to futures markets.

There is no research on the execution of large orders on futures exchanges. As such, this review examines the relevant financial economics literature drawn from the considerable research concerning securities markets that commenced during the 1970's, and which was motivated by the significant changes occurring at that time. To facilitate recognition of the theory and empirical findings, this memo is organized into three sections including the

introduction. Section 2 provides an introduction to market microstructure which permits an organization of critical economic factors that potentially impact market performance. The third and final section presents regulatory criteria necessary to evaluate proposed exchange trading rules that would permit block trades within the context of market performance.

2. Market Microstructure

Market microstructure corresponds to the details of the trading environment that aggregate decentralized information and coordinate market participants' activities into prices and other market characteristics.⁴ A market microstructure refers to: (i) the market participants (market makers, brokers, and so forth); (ii) the rules organizing how transactions take place (hours of operation, transaction priorities, where transactions occur, and so forth); (iii) the types of orders that are permissible and so forth; and (iv) the rules regarding how, when, and what trading information is revealed publicly. Futures block trading rules fragment the market, introducing a separate market or trading venue used in the execution of large futures transactions. These transactions are removed from the traditional market venue, fragmenting information flow and the volume of trade. Consequently, any measurable effects from block trades on the informational efficiency of futures prices may raise regulatory considerations.⁵

A price which is consistent with available information is known generally as an efficient price. There are two major economic factors that may cause a reported commodity price to temporarily not be equal to some fundamental intrinsic value. First, and previously noted, the

⁴ Market characteristics include volume, open interest, and so forth.

⁵ An important public policy issue concerns whether the market impact from fragmentation is substantial. There is considerable variation in the extent of fragmentation across markets. For example, the market for U.S. treasuries is fragmented with the cash market, the repo market, the option market – all reflecting the same underlying instrument. Thus, the issue of fragmentation is dependent on the characteristics of the entire market for the underlying commodity. Section 3 provides a more complete discussion on this topic in the context of regulatory considerations.

demand for immediacy in trading can cause the transaction price to deviate reflecting a liquidity premium. Second, the available information related to a particular commodity may not be fully revealed in its price. This problem, known as the asymmetric information problem, is a result of the distribution of information. An absence of transparency between the traditional trading venue and the block trading venue can affect the distribution of information and consequently, affect market performance. The next discussions review these two economic factors, market liquidity and market transparency with an emphasis on the potential consequences of block trades.

2.1 Market Liquidity

Liquidity plays a fundamental role in the functioning of markets.⁶ A simple definition corresponds to the ability of a market to absorb trades with minimal price impacts within a short period of time. That is, when finding a counter-party to a desired transaction is costless, the market can be described as liquid. The benefits for providing a separate trading venue dedicated to large transactions arise from the incapacity of the traditional trading venue to provide the required liquidity without large transactions costs, such as a liquidity premium. For example, the capitalization of market makers may be insufficient for the large size of a transaction. A trade may incur a liquidity premium, in excess of normal market compensation to liquidity, to induce a counter-party to the trade. The net effect is to cause a deviation in the transaction price, worsening the performance of the market.

For the New York Stock Exchange, transactions in excess of 10,000 shares are categorized as large transactions and have the option to use the upstairs market – the market for

⁶ For a good introduction to the concept of liquidity see Demsetz (1968) who provides an early study of the transaction costs associated with the immediacy or liquidity of a market, and Tinic (1972) who extends this earlier work.

block trades – to conduct the transaction. Empirically, the basic characteristics of block trades correspond to the following two results. First, in the securities market, block transactions are typically sold and not bought. Second, block trades have predictable price effects. That is, they trade at worse (lower) prices and, trades following these block transactions only show a partial recovery to the pre-block price. For example, see Dann, Mayers, and Raab (1977), Holthausen, Leftwich, and Mayers (1987), and Madhavan and Cheng (1997).

One measure of the trading costs corresponds to the bid-ask spread with the market maker receiving this in return for standing ready to provide liquidity services. However, when the bid-ask spread is dependent on trade size, there may be benefits associated with the introduction of a block trade facility. The introduction of block trading on a futures exchange could result in a permanent change in the entire market microstructure, dependent on its use or lack thereof. Segregation of a subset of trades, the large transactions, effectively fragments the market with liquidity removed from the primary trading venue to block trades. Transaction costs, as measured by the bid-ask spread, may increase for the remaining trades in the primary trading venue. The extent to which this occurs in the market is unknown, however, the liquidity premium associated with large transactions may have a greater impact on the transaction price than the potential increase in the bid-ask spread from the lost liquidity. This tradeoff may suggest that the amount of trade lost from the primary trading venue to block trading will determine the total effect on the market. Thus, an important consideration is the determination of what constitutes a large transaction, a transaction large enough for the benefits from block trading to exceed the costs of taking the transaction to the centralized market.

Alternatively, a large trade can be broken into small pieces with the transaction requiring a period of time during which the entire transaction is completed. The introduction of time also

introduces price risk to the transaction. Prior to completion of the transaction, there is the possibility that price may move against the originator of a large trade. This possible occurrence, in comparison to the likely liquidity premium required to remove the position, will have several impacts. In effect, costs associated with completing a trade may increase, the gains may accrue to other market participants and/or may impact the market as a whole.

With the introduction of block trading, a market participant with a large transaction has access to both the traditional trading venue and the block trade venue. A revealing area of research has focussed on examining the reasons market participants use a block trading facility as opposed to taking the trade to the traditional trading venue. This research is important due to its contribution to our understanding of the possible way information may be fragmented between the two trading venues. In general, a trade is motivated by either liquidity needs (the rebalancing of a portfolio) or the arrival of new information. An important theoretical prediction is that liquidity based trades, trades associated with the re-balancing of a portfolio, will make use of a block trading facility whereas, information based trades will use the traditional trading platform or randomize between the upstairs market and the downstairs market.

Seppi (1990, 1992) recognizes an absence of anonymity in the upstairs market where repeated interaction with an upstairs broker permits revelation of whether trades are information or liquidity motivated, thereby affecting trading costs. As a consequence, information based trades use the downstairs market, while liquidity based trades use the upstairs market. This result is dependent on transaction size being sufficiently large. Pichler (1993) models the choice of venue for large trades, upstairs versus floor. In her model, the choice depends critically on the informativeness of the trade. In particular, informed traders are likely to trade in the market rather than upstairs. Recent empirical evidence supports this result. The separation in market

choice for block trades is consistent with the trading behavior observed by Madhavan and Cheng (1997).

2.2 Market Transparency⁷

Market transparency is typically characterized as the extent to which market participants are able to observe information surrounding transactions. However, in practice, the precise definitions used in understanding the theoretical implications of information make the issue complicated. There is general agreement that market performance is strongly impacted by the degree of market transparency. Trading strategies used by market participants are typically dependent on market information, whether information is perfectly or partially revealed.

The price formation process in futures markets coincides with the aggregation of customer orders and the proprietary trading of floor traders as they intermingle in the trading process. Customer orders can arise as either hedge transactions or speculative transactions and coincide with the instructions to trade from banks, pension funds, other institutions, broker-dealers, or commercial interests. In the traditional open outcry exchange, these orders are communicated to floor brokers physically located on the trading floor.

This discussion primarily focuses on the transparency of post-trade information related to block trades, and thus, avoids the larger question regarding the implicit tradeoff between liquidity and information/transparency. Black (1986), in a survey, set forth the groundwork regarding the regulation of market microstructure and recognized an economic tradeoff between price efficiency and market liquidity. In this representative model, information is not distributed evenly among market participants. Market participants are characterized as informed traders, uninformed traders, and market makers. Black suggests that liquid markets require uninformed traders⁷ in order for a market maker to have the incentive trade. A market maker is never sure what type of trader is submitting the trade. The uninformed traders may cause short-term price inefficiency as their trade flow may be unbalanced. However, there is a need for noise in the system in order to generate trading. Otherwise, trade collapses when all traders are informed (or think they are). This point was made eloquently by Bagehot (1971). Recent empirical evidence supports the increase in costs that may accompany the revelation of too much information. Madhavan, Porter, and Weaver (1999) find an increase in trade execution costs following the Toronto Stock Exchange's public dissemination of the limit order book.

Modeling this process requires precisely defining when, how and what is observed in the market by the participants. Economic theory predicts that market makers, informed traders and uninformed traders behave differently with different information conditions. For example, different behavior may be predicted when order flow is known versus when only the net order flow being observed. Even within this discussion, characterizing the transparency of order flow is intricate. Precision is required in characterizing what is meant by saying order flow is common information. Order flow includes information concerning the direction of trade, the size of trade, the identity of trader, and the type of order. Further, a distinction between pretrade and post-trade revelation is an important element to understanding the potential effects of transparency on the market.

For block trades, how trades are communicated to the traditional market venue is very important. That is, what and when information related to a block trade is revealed affects market performance. As an example, in securities markets, trading may occur in blocks, large quantities of stocks, which are negotiated privately and executed as blocks on an exchange. The NYSE requires that all trades be formally executed on the trading floor, thus, each block trade's information is revealed and functionally interacts with the downstairs market, see Appendix A for a description of a block trade on the NYSE. The London International Financial Futures and Options Exchange (LIFFE) recently introduced block trading. Information regarding the trade is required to be publicly disseminated within ten minutes, see Appendix B for a description of LIFFE's Block Trading Facility. This delay permits LIFFE to authorize the trade prior to dissemination. For LIFFE's electronic trading platform, cross-trades are communicated to the

⁸ See Kyle (1985), Madhavan (1992) or Chapter 9 in O'Hara (1995).

For example, in trading mechanisms such as open outcry, there may be information associated with which floor trader initiated a transaction.

market by entering them into the system such that they interact with the order book. For securities markets, the release of post-trading information with delays has been rationalized as a means allowing market makers to unwind their inventories at minimal cost. ¹⁰ By delaying publication, large positions can be removed with a market maker facing fewer risks, and improving the price that is offered by the market maker.

There may be negative consequences from a significant delay in the release of post-trade information. Prior to the market being informed of the transaction, the market participants to the transaction have been granted monopoly rights to the information which, potentially may enhance their profits in subsequent periods. Price discrepancies that may arise between the two trading venues may be arbitraged only by the market participant in possession of the information differences. The advantage is enjoyed by a participant in possession of the information and comes with potential costs to other market participants.¹¹ As opposed to the impact on the distribution of gains and losses across market participants, the delay of publication creates prices that may be old and consequently may cause disruption to the price discovery process.

Several authors have addressed the market impact of information availability and specifically the effects associated with the informational content of block trades. Pagano and Röell (1996) investigate the relationship between a market's transparency and its liquidity. In their model, transparency lowers trading costs for market makers. Thus, a market's transparency also becomes a regulatory issue if a goal of regulation is the protection of uninformed traders. To this end, Gemmill (1996) studies changes in publication rules regarding

¹⁰ This rationale has primarily been used in London markets where small trader participation is infrequent. Block trades are not as common in London markets as the NYSE.

Genumill (1996) reports empirical evidence of this redistribution of profits towards market makers involved in the trades.

block trades done in London, and their effect on liquidity. His transparency study finds no increase in liquidity when block trades are hidden from the market for an extended time. Bloomfield and O'Hara (1999), in an experimental study of market transparency on the quality of market statistics, find that quote disclosure improves the informational efficiency of market prices, but increases the bid ask spread. Both of these papers lend weak support to increased transparency. One method of preserving noise traders in a system is to place certain limits on market transparency. This result is supported by Lyons (1996), who models optimal transparency from currency dealers' perspectives. In his theoretical model, dealers prefer less than perfectly transparent markets when their order flow is informative. Grossman and Miller (1988) offer a model of endogenous market making structure based on exogenous demand for liquidity, although transparency is not addressed directly.

3 Regulatory Considerations and Criteria

Historically, most futures contracts have traded in a single, centralized environment. Corn, soybeans, wheat, and T-bonds have traded in designated pits on the Chicago Board of Trade (CBOT), Eurodollars have traded on the Chicago Mercantile Exchange (CME), crude oil has traded on New York Mercantile Exchange (NYMEX), and so forth. Rarely has there been prolonged head-to-head competition. Even when exchanges trade similar products, on a global scale, they typically capture time differences, segmenting the global trading day rather than competing for the same customers.¹³

¹² A regulatory goal related to transparency that is not addressed specifically concerns the regulatory goal of protecting the uninformed trader. In this case, the impact on transactions costs for the uninformed would be a primary focus.

¹³ Mendelson (1987) offers a model of market fragmentation/ consolidation. His basic finding is that consolidation improves price discovery. Hamilton (1989) found that integrating trading venues increased competition and performance of equity prices. Trading may occur in a variety

The introduction of block trades to exchange trading effectively permits the segregation of trades based on the transaction size. The financial economics literature addresses the issue of centralized trading in terms of market fragmentation. Our focus has been on the extant research motivated by the significant securities market changes which began to take place during the 1970's. Although this research does not directly address the effects of block trading in futures markets, the potential effects of liquidity and transparency on market performance provide the information necessary to develop criteria needed to evaluate proposed exchange trading rules. The suggested criteria approach the problem from the perspective of mitigating the potential negative effects on market performance.

Introduction of block trading to futures trading potentially fragments that market. The effect of market fragmentation on the quality of the market will be dependent on the extent to which the transparency and the liquidity of the market are effected. In the absence of a regulatory criteria to evaluate these impacts, the possibility of friction between the preferences of an exchange and the public interest can not be properly determined. Thus, the following criteria are suggested when consideration of proposed rules permitting or altering block trading are submitted.

First, the extent of fragmentation that occurs in the market for the underlying commodity is an important factor that requires consideration before an analysis of the potential market impacts of block trading is addressed. There is considerable variation in market fragmentation across different commodities. For example, many financial markets have alternative trading venues which offer substitute products to the exchange traded futures contract. In these cases, there is substantial market fragmentation with the futures market

of settings, but if the trading in these settings is transparent, then price discovery may not suffer. Informational links create a virtual consolidated market.

providing market participants with only a small subset of the services available in the market, as well as playing a small role in information aggregation. Alternatively, some agricultural commodities are not fragmented to the extent observed in the financial markets. Few close substitutes to the exchange traded futures contract are available to provide market users services such as price basing, risk shifting, and price discovery. As a consequence, the introduction of block trading to these, more consolidated markets may have a more significant impact on market performance and quality relative to the more fragmented market commodities.

Second, a fundamental consideration is the determination of what constitutes a large futures transaction. There is recognition of the importance of a centralized market - its contribution to the production of quality prices. As a consequence, a specification rule requires determining a minimum threshold for block trades by relying on a commodity's market characteristics. That is, a large transaction is defined as one that potentially affects the quality of the price and, consequently, will have net benefits associated with introducing an alternative execution procedure such as block trades. A criteria for block trading rules is to ensure that a large block size is made with reference to a large size transaction in the cash market.

A third consideration corresponds to how the negotiated price of the block trade is related to prices in the primary trading venue.¹⁴ There is no reason to expect the two prices to agree. The counter-party to the block trade might require a price concession to protect an informational advantage enjoyed by the initiator to the transaction or to compensate the provided liquidity.¹⁵ As a consequence, there is the possibility of abuse without the inclusion of trading provisions

¹⁴ This criteria corresponds to LIFFE's expressed intent to ensure that the pricing on block trades satisfies "fair market value" principles. See Appendix B and the references therein for further clarification.

that link the block trade price and the price observed in the primary trading venue. The nature of these provisions found in the rules will vary, dependent on the type of the trading platform and the requirements of the particular market. For example, the NYSE requires that all transactions must cross the floor. To this end, a block trade transaction is completed when it is offered on the floor of the exchange, permitting floor participants an opportunity to participate. This ensures that a negotiated block trade price will be sufficiently close to the market's perceived value, otherwise the counter-party to the transaction will not enjoy the price discrepancy.

Trading rules may require a block trade transaction to be entered on the electronic platform, and thus, interact with orders previously in the system. Potentially, rules may require an adaptation of current exchange provisions that effectively require the block trade to interact with transactions on the primary trading platform. Or include a requirement that a negotiated block trade price must explicitly be related to primary market prices. The third criteria corresponds to assessing the ability of block trading rules to ensure prices that are consistent with current market conditions and not the pre-negotiated nature of the transaction.

The fourth criteria for a regulator coincides with assessing proposed block trading rules for their impact on market transparency. That is, how and when block trade information is communicated is a fundamental issue that requires attention by a regulator. Fragmentation of information between the primary market and block trading is affected by the trading rules and potentially may hinder performance of the market. Prompt reporting of the

¹⁵ In general, the magnitude of the price difference will also be dependent on the market's current characteristics.

¹⁶ This might correspond to modification of the all or nothing trading procedure permitted under the Chicago Mercantile Exchange's trading rules or LIFFE's cross-trading provisions.

¹⁷ For example, trading rules might require a block trade price to fall within the trading range observed during a specified period of time that adjoins the block transaction.

trade characteristics to the market may mitigate any market consequences that are associated with the introduction of block trading. The time necessary to report a transaction will be determined, in part, by the how block trades are transacted. These include the trading platform, the paperwork involved in executing the block transaction and so forth. To some extent, there may be overlap between information used in other criteria, however, market transparency surrounding block trades may be an important element in a market's subsequent performance.

The fundamental issue related to evaluating proposed block trading rules is the evaluation of the net market impacts. Market costs from the potential diminution in market liquidity and market transparency compared with the market benefits from the provision of an alternative execution facility that improves the price performance enable an assessment that is consonant with the public interest. Four elements have been identified as important in an evaluation of the market organization associated with the introduction of block trading and with these considerations, the possible negative consequences to the economic functioning of futures market can be mitigated.

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Appendix A – Block Trading on the New York Stock Exchange

The following excerpt describing how a block trade takes place on the New York Stock Exchange is taken from Luskin, Donald L., 1989, "Upstairs, Downstairs: The Block Traders and the Specialists," pp 153-160 in *The Complete Guide to Securities Transactions*, (Wiley, New York).

"The typical upstairs trade begins on the trading desk of an institutional investor, let's say a mutual fund in Boston. The fund's trader has been instructed by the fund's portfolio manager to promptly buy 500,000 shares of XYZ. The trader can see on his quote screen that the last trade in XYZ was at 52, and that the market is currently 51 ½ bid, offered at 52 ½. On average, XYZ trades only 200,000 shares in an entire day, so the trader is justifiably concerned that if his large buy order were simply dropped on the New York Stock Exchange (NYSE), it might move the stock significantly higher. So he calls his broker and asks where the firm's upstairs trader will sell him half a million shares."

"As soon as the broker receives the inquiry, he relays it to the block trader responsible for XYZ's industry group. The trader shouts to the other salesmen to recall any selling interest in XYZ that they may have heard recently from their customers. He consults an institutional holdings database to see the XYZ positions held by banks, mutual funds, and pension funds who might be persuaded to sell. He may call his firm's research analyst to learn if there are any special news developments recently announced or closely anticipated in XYZ. He will consult his firm's borrow desk to make sure that XYZ is available to be borrowed (since the trader has no existing long position in XYZ, he will have to borrow shares in order to sell them short). He will consult his firm's floor broker on the NYSE to see if there has recently been any special interest in the stock on the floor. He will glance at a screen on his desk that tells him how S&P stock index futures on the CME are trading relative to the actual index, hoping to get a clue as to the tenor of short-term market sentiment. He will call his floor broker on the Chicago Board Options Exchange to see if there has been any unusual trading activity in the options listed on XYZ. Ultimately, relying as much on sheer guts and knowhow as on any objective information he has received, the trader will make an offer: He will sell half a million shares of XYZ at 53."

"The broker relays the offer back to the customer, the trader at the mutual fund in Boston. Now the customer must decide whether to accept the upstairs trader's offer of 53-three-quarters of a point higher if he tried to buy it without the upstairs trader's intervention. Yet the customer knows that the upstairs trader is no fool-the upstairs trader must believe that he himself can buy the stock for 53 or less (otherwise he would end up taking a loss on the position). In making his decision, the customer will probably consider the fact that he is in a hurry to buy the stock-his portfolio manager believes has valuable information about XYZ. On the other hand, the upstairs trader will in no special hurry to unwind his position, so he will likely have less price impact; and the longer he gives himself to unwind, the greater the chance he will find an interested seller of XYZ through his salesmen's worldwide network of institutional investors. Ultimately, the customer's decision will be intuitive, based primarily on a commonsense assessment of whether three-quarters of a point is a fair premium to pay for what amounts to 'execution insurance'."

"When the customer accepts the offer, the trade is consummated for all practical purposes. Technically, however, there remains one very important step: printing the trade on the NYSE tape. Even though the trade has truly been completed away from the Exchange, the

upstairs trader's firm, which is an Exchange member, is bound by rules requiring that all trades be formally executed on the floor. To accomplish this, the upstairs trader instructs his firm's floor trader to execute the trade with the specialist. The floor trader approaches the specialist and announces that he has 500,000 shares of XYZ to cross at 53. First, however, because 53 is higher than the current offered price, any offers to sell at 53 or less that are on the specialist's book, or held in the order decks of the floor traders congregated at the specialist's post, will have to be accommodated. These competing orders pose no obstacle to the orderly completion of the trade: They simply sell to the customer at 53, receiving a somewhat better price than they expected (the upstairs trader, consequently, ends up having to sell fewer shares than he originally anticipated)."

Appendix B - Description of the London International Financial Futures and Options Exchange Block Trading Facility

On April 19, 1999, the London International Financial Futures and Options Exchange (LIFFE) introduced their Block Trading Facility (BTF), permitting the block trade of specified futures and options contracts. To date, approximately one percent of average daily futures volume at the exchange has been executed using the BTF. In general, block trading has occurred in the stock index futures (FTSE 100) with block trading ranging from zero percent to thirty-four percent of the daily volume in these contracts. The remaining products have not witnessed the same usage of the block trading platform, between zero percent and sixteen percent of the daily volume within the product groups has been attributable to block trading. The dominant trading platform has retained its precedence with the incidence of block trading demonstrating considerable variance in use across days.

LIFFE's introduction of its BTF has been restricted to most of their financial and equity products with the commodity products excluded.¹⁹ With exception to the commodity products, the currently excluded financial and equity products are under review to be extended block trading provisions. Currently LIFFE has no plans on extending access to the block trading facility to commodity contracts.

The BTF was designed with the intent of maintaining the existing trading facilities as the primary price formation and trade execution facility. Further, LIFFE has expressed their intent to ensure that the pricing on block trades satisfies "fair market value" principles. In particular, LIFFE states that fair market value

"means, in relation to any Block Trade price quoted by a member to another member or to a wholesale client or in respect of Block Trade entered into by a member, a price which is considered by the member to be the best available for a trade of that kind and size. When determining a Block Trade price, a member should, in particular, take into account the prevailing price and volume currently available in the pit, the liquidity of the pit and general market conditions, but shall not be obligated to obtain prices from other members, unless this would be appropriate in the circumstances."

These principles are consonant with ensuring that prices realized on block trades are both "fair and reasonable given the lot size of the Block Trade and the price and size of business being quoted in the 'pit.'" In this manner, LIFFE recognized that an alternative execution procedure would not always coincide with price quotes on trades concurrently quoted on the primary trading platform. To enforce their pricing principles regarding block trading, LIFFE requires members to justify any trades negotiated at apparently abnormal levels and will reserve the right to refuse to register any such trades.

¹⁸ The four product categories at LIFFE are short term interest rates, bonds, indexes, and commodities. Both the bond and index futures products are primarily traded on LIFFE's CONNECT electronic platform.

Commodity products include cocoa, coffee, potatoes, barley, and wheat.

²⁰ See http://www.liffe.com/products/blockprcdr.htm.

²¹ See http://www.liffe.com/liffe/products/blocktrad.htm.

LIFFE requires that all negotiated trades using the BTF be reported within five minutes from the verbal agreement of the trade. Subsequently, the trade is authorized by LIFFE and then trades will be disseminated publicly within five minutes. Thus, following the initial agreement of the block trade, the information is revealed to the market within ten minutes. Block trades are reported within existing reports with each trade indicated as having occurred on the BTF. In particular, prices that result from block trades are reported along with other prices and can constitute reported highs and lows.

Market participants permitted to utilize the Block Trading Facility include LIFFE members and non-member customers satisfying specified criteria. This criterion includes requiring that potential customers have sufficient knowledge, expertise and understanding of the implications of the facility. Disclosure documents to non-member block trading clients are required that place emphasis on the price not having been determined on the primary trading platform.

In addition to pricing requirements, disclosure requirements, eligibility requirements, and the product eligibility, LIFFE specifies threshold levels for each affected contract. Each threshold accounts for a small percentage of the average daily volume for the products. Recently, the minimum size of block trades has represented approximately one to three percent of daily trading volume on the specific contract. For example, the FTSE 100 futures contract has a block trade threshold of 750 lots which has ranged from one to three percent of daily volume during recent trading.



Appendix C

Cash and Futures Trade Data for the U.S. Treasury Bond and U.S. Treasury Ten-year Note

TO:

John Mielke

FROM:

Beth Seely, Steve Cho

RE:

Distribution of Transaction Sizes Observed in the Chicago Board of Trade Treasury

Bond Market

Attached are two summary tables describing the frequency distribution of futures transaction sizes observed in the Chicago Board of Trade's Treasury bond futures market. The sample used to obtain the reported characteristics was drawn to be representative of trading volume observed in the bond contract markets during the period January 1998 through July 1999.

Two methodologies were employed to obtain transaction sizes. The first method ignores the possibility that an executing broker may have been required to break up a large transaction into smaller pieces in order to find counter-parties to the transaction. The second method corrects the downward bias in transaction size by estimating the transaction size an executing broker traded at a single price within a specified time period. A transaction that is executed at a single price but with several counter-parties is counted as one transaction. Both methods result in an analysis that looks only at transactions that are traded at a single price. As a consequence, both methods will tend to understate transaction sizes, biasing the frequency distribution downward.

For the unadjusted transaction size characteristics, approximately ten percent of all transactions were for 50 contracts or more with approximately four percent of transactions exactly 50 contracts. Using the adjusted transactions, we observe approximately 13 percent of all transactions sized in excess of at least 50 contracts. Thus, if block trades were defined as transactions at least 50 contracts in size, 13 percent of all transactions would have been eligible to be traded as a block. This corresponds to 46% of the trading volume potentially transacting via block trades in the unadjusted sample, and 73% of the trading volume in the adjusted sample.

Using five percent as a criteria in the selection of a minimum size for a block transaction would suggest transactions that are in excess of 100 contracts. This is taken from the table reporting the adjusted frequency distribution of transaction sizes. The data reports that approximately 95% (precisely 94.7%) of all transactions conducted in the Chicago Board of Trade's Treasury bond futures contracts were 100 contracts or less. Five percent of all transactions were in excess of 100 contracts. With respect to the trading volume, transactions in excess of 100 contracts account for 51% of the volume observed.

Transaction Size Characteristics of Trades Observed in the Chicago Board of Trade's

Treasury Bond Futures Market* - Unadjusted

Transaction Size	Percent Frequency of Transaction Sizes	Cumulative Percent Frequency of Transaction Sizes	Percent of Trading Volume
Less than 50 contracts	90.6%	90.6%	40.0%
Equal to 50 contracts	4.2%	94.8%	14.0%
Less than 100 contracts	95.9%	95.9%	59.0%
Equal to 100 contracts	2.6%	98.5%	17.0%
Less than 200 contracts	99.0%	99.0%	81.0%
Equal to 200 contracts	0.5%	99.5%	7.0%
Less than 300 contracts	99.7%	99.7%	91.0%
Equal to 300 contracts	0.1%	99.8%	2.0%
Less than 400 contracts	99.8%	99.8%	93.0%
Equal to 400 contracts	0.1%	99.9%	1.0%
Less than 500 contracts	99.9%	99.9%	95.0%
Equal to 500 contracts	0.1%	100.0%	3.0%
Less than 1000 contracts	100.0%	100.0%	99.0%
Equal to 1000 contracts	0.0%	100%	1.0%

^{*}A transaction corresponds to a trade made by an executing broker in the pit at a single price. Thus, to read this table, 90.6 % of the transactions observed were for less than 50 contracts. Similarly, 4.2% of all transactions were for exactly 50 contracts. If a block trade capability were available, approximately ten percent (9.4%) of all transactions would have been eligible if the minimum size of a block was 50 contracts. If the minimum size of a block transaction was specified as 500 contracts, one-tenth of one percent of all transactions would be eligible as a block trade.

Transaction Size Characteristics of Trades Observed in the Chicago Board of Trade's

Treasury Bond Futures Market** - Adjusted

Transaction Size	Percent Frequency of Transaction Sizes	Cumulative Percent Frequency of Transaction Sizes	Percent of Trading Volume
Less than 50 contracts	86.6%	86.6%	27.0%
Equal to 50 contracts	2.7%	89.3%	5.0%
Less than 100 contracts	92.8%	92.8%	42.0%
Equal to 100 contracts	1.9%	94.7%	7.0%
Less than 200 contracts	97.3%	. 97.3%	62.0%
Equal to 200 contracts	0.5%	97.8%	4.0%
Less than 300 contracts	98.7%	98.7%	75.0%
Equal to 300 contracts	0.2%	98.9%	2.0%
Less than 400 contracts	99.3%	99.3%	82.0%
Equal to 400 contracts	0.0%	99.3%	1.0%
Less than 500 contracts	99.5%	99.5%	86.0%
Equal to 500 contracts	0.1%	99.6%	2.0%
Less than 1000 contracts	99.9%	99.9%	96.0%
Equal to 1000 contracts	0.0%	99.9%	1.0%

^{**}A transaction corresponds to the trades made by an individual executing broker in the pit at a single price within a specified time bracket. Thus, to read this table, 86.6 % of the transactions observed were for less than 50 contracts, and 2.7% of all transactions were for exactly 50 contracts. If a block trade capability were available, approximately thirteen percent (13.4%) of all transactions would have been eligible if the minimum size of a block was 50 contracts. If the minimum size of a block transaction was specified as 500 contracts, five-tenths of one percent of all transactions would be eligible as a block trade.

Transaction Size Characteristics of the Chicago Board of Trade's Ten Year Treasury Note Futures Contract*

Transaction Size (contracts)	Percent Frequency	Cumulative Percent Frequency of Transactions**	Cumulative Percent Frequency of Volume**
1	10%	10%	0%
2	5%	16%	0%
3	4%	19%	1%
4	2%	22%	1%
5	6%	28%	2%
10	11%	44%	- 5%
20	6%	56%	10%
25	4%	61%	12%
50	10%	81%	31%
75	0%	84%	36%
100	8%	93%	57%
125	1%	46%	5%
150	0%	95%	62%
> 150	5%	100%	100%

^{*}The data used in estimating the values reported in the table above are from pit transactions at the Chicago Board of Trade observed during five trading days in 1999. The five days represent low to high volume trading days during the 1999 trading year.

Average Transaction Size:

44 contracts

Median Transaction Size:

10 contracts

^{**}The cumulative percent frequency of transactions measures the percent of of all transactions at least the size indicated by transaction size and smaller. The cumulative percent frequency of volume is the percent of total volume that is attributed to transactions the size indicated and

December 15, 1999, Cash Market Transaction Size Data for the U.S. Treasury Markets

Description (On the Run)	Average Size Interdealer Broker A	Average Size Interdealer Broker B
Two-year No	te 19 Million	20.7 Million
Five-year No	te 9 Million	7.7 Million
Ten-year Not	te 7 Million	6 Million
Thirty-year I	Bond 4 Million	3 Million